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NEGATIVE MODALITY IN HINDI \*

1. *Introduction*

The present paper deals with negative modality in Hindi. Dahl (1979) has identified three principal ways of expressing sentential negation in natural languages, namely, (a) negation as a morphological category on verbs, (b) negation as an auxiliary verb, or (c) negation as an adverb-like particle. Hindi shows negative modality items which can be considered to belong to the third way. In fact, it has three negative particles to express negative modality, namely, *nahĩ*, *mat*, and *na*. Bhatia (1995:12), without providing any theoretical explanation, classifies these particles in the following way:

- (1) *mat* non-honorific imperative,  
    *na* subjunctive, honorific imperative, conditional (past  
        and subjunctive),  
        participial and gerundive phrases,  
    *nahĩ* elsewhere

Some other scholars have identified and linked *nahĩ* and *mat* to declarative and imperative sentences respectively but have not assigned any specific grammatical or semantic functions to the third particle.<sup>1</sup> In a descriptive note, Kachru

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<sup>1</sup> According to Van der Auwera, there does not seem to be a relevant difference between *nahĩ* and *na*. He says "... and I will not investigate the possible relevance of the choice between *nahĩ* and *na*, my suspicion being that the choice is irrelevant". (1996:3, draft).

(1980:109) states that the particles *na* and *mat* are used in restricted contexts and *nahĩ* is the general negative marker. But, what are these restricted contexts? How to decide which contexts are restricted? Furthermore, what does *the general negative marker* mean? Although the above list by Bhatia is based on observations of linguistic data and tries to classify different negative particles according to their corresponding sentence types, it is without any theoretical explanation. In the present study we want to look at these negative particles from the point of view of modality and aim at putting forward a modality-based model which can provide explanations for their distribution in the language.

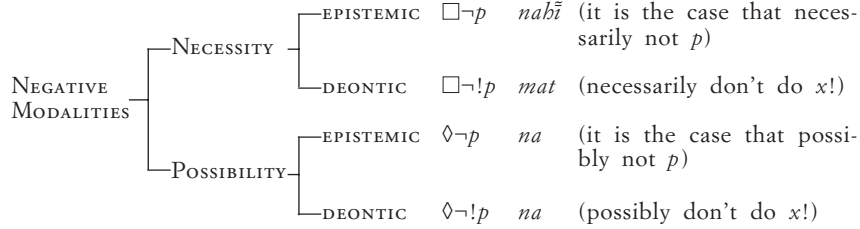
## 2. *Negative modality in Hindi*

This study, therefore, has a limited yet specific goal. The negative particles can be studied from different points of view: the negative polarity items and their syntactic role, the scope of negation, etc. Even from the point of view of modality, negative markers can be studied at at least three levels: at the level of the speaker, at the level of the subject or agent referred to in an utterance, or in the case of a *verba dicendi* utterance, at the level of the person reporting the utterance. Our aim in this paper, however, is only to see the distribution of these negative markers among different sentence types. This will necessitate a full typological picture of Hindi sentences. We will try to check the grammaticality and/or pragmatic acceptability of the negative particles in different sentence types. As we have mentioned elsewhere, three Hindi negative particles are organized to serve different modality-based purposes of the speaker.<sup>2</sup> To express epistemic and deontic modal necessities the speaker employs *nahĩ* and *mat* respectively, whereas to express both epistemic and deontic modal possibilities he uses *na*. There are cases where this modality-based explanation runs into trouble in that the demarcation-line between *nahĩ* and *na* does not seem to hold, leading to a false impression that they might be interchangeable; but there are other clear-cut cases in which one cannot be substituted for the other.

<sup>2</sup> See SHARMA 1999:292.

This violation of border-line is also due to dialectal and personal preferences of the speaker. Thus, our proposal in this regard should look like the following:

(2)<sup>3</sup>



The distribution of three Hindi particles as characterized in this diagram is based on the type of modality meaning the speaker wishes to attach to an utterance. To clarify the problematic difference between the two negative particles, i.e. *nabhĩ* and *na*, Guru (1952:146) came up with the following suggestion: *na* expresses a simple negation whereas *nabhĩ* carries a 'certainty of negation' (*niṣedh kā niścay*). His observation points to the fact that the Hindi particle *nabhĩ* is derived from the Sanskrit negative marker *na* plus the verb *āhĩ* 'to be' which is supposed to add this 'certainty' element to the simple negative particle *na*. Although limited to a general fact only and without an overall picture of the functions of negative particles, Guru's observation is in line with the above diagram. It is, in fact, the necessity modality meaning that he has in mind in distinguishing *nabhĩ* from *na*, attributing 'certainty of negation' to the former particle. Bhatia (1995:16) does not agree with Guru's

<sup>3</sup> Throughout the paper, the following symbols and abbreviations will be used: Symbols:  $\Box$  = necessarily; obligatorily;  $\Diamond$  = possibly; K = knowledge;  $K_s$  = the speaker knows; B = belief;  $B_s$  = the speaker believes; W = element of will or desire;  $W_s$  = speaker wants / desires; . = that; p = proposition;  $t_{n-1}$  = prior to the time of utterance;  $t_n$  = concomitantly at the time of utterance;  $t_{n+1}$  = later than the time of utterance;  $\bullet, \bullet \rightarrow$  = habitual aspect;  $\longrightarrow$  = continuous aspect;  $\longrightarrow\#$  = perfective aspect. For the sake of simplicity, we are introducing the '.' symbol as a conjunction in our formalism, though it is not used between modal operators in any traditional logical theory. Therefore,  $K_s.\Box p$  should read like this: 'for all the speaker knows, it is necessarily the case that *p*'.  $\otimes$  before a sentence = grammatically unacceptable,  $?$  before a sentence = anomalous or pragmatically unacceptable.

conclusion. His claims can be summarized in the following way:<sup>4</sup>

- (i) The difference between *nahĩ* and *na* is semantic; their distribution is not governed simply by emphasis;
- (ii) This binary distinction along the scale of emphasis is very vague;
- (iii) Also definiteness cannot be considered as a factor;
- (iv) Since the past tense allows both the particles interchangeably, no conclusion can be drawn.

Bhatia's objections to the explanation given by Guru are not correct. Firstly, it is true that the difference between the two particles is not merely emphatic, but rather semantic. But what is meant here by 'semantic'? How to link these particles to some particular tense(s)? What Guru means by 'emphasis', if he does so at all, is what can be termed in modern terminology as epistemic necessity: in making an utterance U, the speaker S, by different means, attaches an epistemic-necessity-negation element to the sentence which roughly means *for all I know, it is the case that necessarily not-p*. This modality meaning is exactly what Guru means by *niśedh kā niścay* 'certainly not' which has wrongly been interpreted by Bhatia. Secondly,

<sup>4</sup> "Although this observation is valid in the diachronic grammar of Hindi, Marathi and Punjabi, it is not true of the synchronic grammar of these languages for the following reasons: First, it is clear from the table (1) (partly cited above in (1)) the distribution of *nahĩ* vs. *na* is governed by semantic criteria (i.e. tense, etc.) rather than emphatic vs. non-emphatic. Second, the binary distinction of NEG along the scale of 'emphasis' is very vague. Emphasis is not inherent in *nahĩ*, it is determined by various other grammatical elements such as emphatic particle *hĩ* or phonetic elements such as stress. Third, if the word *niścay* is interpreted as 'definiteness' and it is claimed that Guru meant that *nahĩ* indicates 'definiteness', then it should not co-occur with dubitative adverbs such as *śāyad* 'perhaps'. But this is not the case, *nahĩ* does co-occur with the adverb *śāyad* 'perhaps' as shown below:

vo	śāyad	nahĩ	āegā
he	perhaps	NEG	come will
Perhaps he will not come.			

Fourth, Guru's explanation and the example with past tense also implies that every negative sentence can be realized in two forms in different tenses i.e. one with *nahĩ* another with *na*. Such a conclusion is counter-intuitive since the sentences with would be ill-formed." (Bhatia 1995:16)

the distinction along the scale of epistemic and deontic necessity and possibility is not vague; it is the speaker's background and change of his modal attitude in making an utterance which are responsible for any violation of the dividing line. Furthermore, there are situations in which a dual modality may be all right; hence the interchangeability between the particles. Thirdly, there may be some floating adverbs in a sentence which may or may not become part of propositional modal meaning; they may very well remain isolated. The following is the example discussed by Bhatia (1995:16):

- (3) 

vo	śāyad	nahĩ	āegā
he	perhaps	NEG	come-will
Perhaps he will not come.			

The floating dubitative adverb *śāyad* 'perhaps' in the above sentence is an extra element attached by the speaker to a sentence and has to do with the verb rather than with the modality of the sentence. Both the affirmative *vo āegā* (He will come) and negative *vo nahĩ āegā* (He will not come) have the same modal meaning at the sentential level: the speaker believes that proposition *p* is necessarily true at time  $t_{n+1}$ . It should not be confused with the sentence-internal negative modality which is different in the affirmative and negative versions, *He will come* and *He will not come*. The sentence carries the speaker's belief containing modal 'necessity', rather than a modal possibility. The dubitative adverb *śāyad* 'perhaps', thus, is not in contrast with the inherent modal necessity of the sentence; it merely expresses a different shade of modal meaning. Finally, the abundant presence of the negative particle *na* almost exclusively in the 'perfective without a tense marker' (simple past or simple perfective) is a topic of further research. Roughly speaking, *na* is much more frequent in the eastern variety of Hindi rather than in the western one in which *nahĩ* is preferred instead. Also, the *na* particle with the simple perfective is frequently used in the so-called indirect constructions in which the subject is in the dative case (dative experiencer). Furthermore, very often the presence of a perfective participle in a remnant *protasis* (antecedent) or *apodosis* (consequent) of a conditional sentence is mistakenly considered to be the simple past tense (simple perfective).

2.1. *Negative Epistemic Modality in Hindi*2.1.1 SPEAKER'S KNOWLEDGE  $K_s, \Box \neg p$ 2.1.1.1  $K_s, \Box \neg p \text{ } t_{n-1}$ 

MODALITY: INDICATIVE PAST

ASPECT I HABITUAL	<i>Habitual Past</i> $K_s, \Box \neg p \bullet, t_{n-1}, \bullet \rightarrow$	<i>vah kbātā <u>nabī</u>/ ?na/⊗mat thā</i> 'He wouldn't eat'
ASPECT II CONTINUOUS	<i>Continuous Past</i> $K_s, \Box \neg p \rightarrow t_{n-1} \rightarrow$	<i>vah kbā <u>nabī</u>/ ?na/ ⊗mat rahā thā</i> 'He wasn't eating'
ASPECT III PERFECTIVE	<i>Perfective without a tense marker</i> $K_s, \Box \neg p \text{ } t_{n-1} \#$	<i>usne <u>nabī</u>/ na/ ⊗mat khāyā</i> 'He didn't eat'
	<i>Perfective Past</i> $K_s, \Box \neg p \text{ } t_{n-1} \rightarrow \#$	<i>usne khāyā <u>nabī</u>/ ?na/⊗mat thā</i> 'He hadn't eaten'
ASPECTLESS	<i>Aspectless Past</i> $K_s, \Box \neg p \text{ } t_{n-1}$	<i>vah cor <u>nabī</u>/ ?na/⊗mat thā</i> 'He was not a thief'

[NEGATIVE MODAL MEANING: In order for you to take notice of it and act accordingly, I want to communicate to you that I know that  $\Box \neg p$  (i.e. it is the case that necessarily not- $p$ ) which is tantamount to  $K_s, \neg \Diamond p$  (i.e. I know that it is not-possible that  $p$ ). I, furthermore, assert and vouch for the veridicality of  $\neg p$ . Other logical relations of this negative category are the following:

Entailment:  $K_s, \Diamond \neg p$   
 Contradictoriness<sup>5</sup>:  $K_s, \Diamond \neg \neg p, \neg \Box \neg p$

<sup>5</sup> Contradictoriness is the relation found in pairs such as *Cesare is sleeping* and *Cesare is not sleeping*. In this type of negation if one of the two sentences is true, the other is necessarily false:

$p$	$\neg p$
T	F
F	T

Contrariness<sup>6</sup>:  $K_s. \Box \neg \neg p, \neg \Diamond \neg p$

As far as the time reference of the action is concerned, I affirm that the action(s) or state(s) of affairs described in  $\neg p$  necessarily did not take place at  $t_{n-1}$ . In aspectual terms, the scope of negation may vary. In the habitual aspect, for example, the negative marker is related to a period containing different points in time and does not exclude the possibility of action(s) having taken place at a point in time outside of the period referred to. Likewise, the scope of negation in the progressive aspect is a particular point in time rather than any point in time before the utterance. The negation in this aspect therefore does not mean that the action never took place. In the perfective aspect, although the scope of negation is the completion of the action but it excludes also the possibility of the action having taken place. The negative marker for this mood is *nahĩ*, although in the perfective aspect without a tense marker *na* is quite frequent, especially in the eastern variety of Hindi.]

#### 2.1.1.2 $K_s. \Box \neg p_{tn}$

MODALITY: INDICATIVE PRESENT

ASPECT I HABITUAL	<i>Habitual Present</i> $K_s. \Box \neg p \bullet, t_n, \bullet \rightarrow$	<i>vah kbātā nahĩ/ @na/ @mat hai</i> ‘He doesn’t eat’
ASPECT II CONTINUOUS	<i>Continuous Present</i> $K_s. \Box \neg p \longrightarrow t_n \rightarrow$	<i>vah khā nahĩ/ @na/ @mat rahā hai</i> ‘He is not eating’
ASPECT III PERFECTIVE	<i>Perfective Present</i> $K_s. \Box \neg p \rightarrow \# t_n$	<i>usne kbāyā nahĩ/ @na/ @mat hai</i> ‘He hasn’t eaten’
ASPECTLESS	<i>Aspectless Present</i> $K_s. \Box \neg p t_n$	<i>vah cor nahĩ/ @na/ @mat hai</i> ‘He/she is not a thief’

In other words, if *Cesare is sleeping* is true its negative counterpart *Cesare is not sleeping* false. They cannot be both false at the same time: ?*Cesare is neither sleeping nor not sleeping*.

<sup>6</sup> Contrariness can be seen in the following pair of sentences: *Cesare is a good man* and *Cesare is a bad man*. Unlike in the previous pair, the sentences of this pair can both be false at the same time: *Cesare is neither a good man nor a bad man*.

[MODAL MEANING: In order for you to take notice of it and act accordingly, I want to communicate to you that I know that  $\Box\neg p$  (i.e. it is the case that necessarily not- $p$ ; in other words, it is not possible that  $p$ :  $\neg\Diamond p$ ). I, furthermore, assert and vouch for the veridicality of  $\neg p$ . Except for the time reference of the proposition, the logical relations of this type are the same as of the previous type, namely (2.1.1.1):

Entailment:	$K_s. \Diamond\neg p$
Contradictoriness:	$K_s. \Diamond\neg\neg p, \neg\Box\neg p$
Contrariness:	$K_s. \Box\neg\neg p, \neg\Diamond\neg p$

In the case of a habitual aspect, the action(s) described in  $\neg p$  does not take place frequently at  $t_n$ . In the case of a continuous or progressive aspect of the verb, the action(s) described in the utterance are not taking place at  $t_n$ , whereas in the case of a perfective aspect they haven't had a termination point at  $t_n$ . In the perfective aspect, though the scope of negation is the termination point of the action, the conventional implicature is that the action didn't take place at all. The veridicality of the states of affairs contained in the proposition  $\neg p$ , however, holds for the time  $t_n$  only, and their pre-or-post- $t_n$ -existence can neither be refuted nor asserted. The negative marker employed to convey this meaning is *nahĩ* only and *na* in this context is either ungrammatical or at least pragmatically unacceptable.]



### 2.1.2. SPEAKER'S BELIEFS $B_s. \Diamond \neg p$

SENTENCES WHICH CARRY SPEAKER'S BELIEFS CONTAINING NEGATIVE EPISTEMIC POSSIBILITY

#### 2.1.2.1 $B_s. \Diamond \neg p t_n$

MODALITY: SUBJUNCTIVE POTENTIAL

ASPECT I HABITUAL	<i>Habitual Subjunctive</i> $B_s. \Diamond \neg p \bullet, t_n, \bullet \rightarrow$	<i>vah kbātā ?<u>nabī</u>/na/ @mat ho</i> 'He may not be eating habitually'
ASPECT II CONTINUOUS	<i>Continuous Subjunctive</i> $B_s. \Diamond \neg p \text{ — } t_n \rightarrow$	<i>vah kbā?<u>nabī</u>/na/ @mat rahā ho</i> 'He may not be eating (now)'
ASPECT III PERFECTIVE	<i>Perfective Subjunctive</i> $B_s. \Diamond \neg p \rightarrow \# t_n$	<i>usne kbāyā ?<u>nabī</u>/na/ @mat ho</i> 'He may not have eaten (by now)'
ASPECTLESS	<i>Aspectless Subjunctive</i> $B_s. \Diamond \neg p t_n$	<i>vah cor na?<u>nabī</u>/na/ @mat ho</i> 'He/she may not be a thief'

[MODAL MEANING: For all the information that I have, I believe that at  $t_n$  it is the case that possibly not- $p$  (i.e.  $\Diamond \neg p$ ), although I don't know whether it is necessarily not- $p$  (i.e.  $\neg K_s. \Box \neg p$ ) or necessarily  $p$  (i.e.  $\neg K_s. \Box p$ ), and that this belief is not-necessarily-not- $p$  (i.e.  $B_s. \neg \Box \neg p$ ). I, therefore, in order for you to take notice of it and act accordingly want to communicate to you that, although I do not know it, I nonetheless believe that the action(s) or state(s) of affairs described in the proposition possibly does not exist at  $t_n$ . The logical relations of this type are the following:

Contradictoriness:  $B_s. \Box \neg \neg p, \neg \Diamond \neg p$

Subcontrariness:  $B_s. \Diamond \neg \neg p, \neg \Box \neg p$

The most frequent negative marker in this mood category is *na*, although in the western variety of Hindi *nabī* can also be found which is pragmatically not acceptable in the standard variety of Hindi.]

2.1.2.2  $B_s. \Diamond \neg p \ t_{n+1}$ 

MODALITY: SUBJUNCTIVE/OPTATIVE

ASPECT I HABITUAL		
ASPECT II CONTINUOUS	<i>Continuous Optative</i> $B_s. \Diamond \neg p \ t_{n+1}$	<i>vah khātā ? nahĩ/ na/ @mat rabe</i> 'He may not be eating (then)' 'May he not be eating (then)'
ASPECT III PERFECTIVE	<i>Perfective Optative</i> $B_s. \Diamond \neg p \longrightarrow \# \ t_{n+1}$	<i>vah kbā? nahĩ/ na/ @mat le</i> 'He may have eaten (then)' 'May he have eaten (by then)'
ASPECTLESS	<i>Aspectless Optative</i> $B_s. \Diamond \neg p \ t_{n+1}$	<i>vah ? nahĩ/ na/ @mat kbāe</i> 'He may not eat' 'May he not eat'

[MODAL MEANING: For all the information that I have, I believe that it is the case that possibly not- $p$  (i.e. it is the case that not-necessarily-not-not- $p$ :  $\Diamond \neg p \leftrightarrow \neg \Box \neg \neg p$ ). The difference between the former category (2.1.2.1) and the present one can be understood in the following way: while in the previous category I don't know that not- $p$  but I may have the possibility, if I desire, of knowing if not- $p$  or if- $p$  since the veridicality of possibly-not- $p$  and possibly- $p$  is anchored at the time of utterance  $t_n$ , in the present category I may not know it since the action(s) or state(s) of affairs reported in not- $p$  do not exist at  $t_n$  and will only possibly take place only at  $t_{n+1}$ . I therefore want to communicate in order for you to take notice of it and act accordingly that I believe that the action(s) or state(s) of affairs described in  $p$  may take place or exist at  $t_{n+1}$ . The other logical relations of this type are the same as of the previous type, namely (2.1.2.1):

Contradictoriness:  $B_s. \Box \neg \neg p, \neg \Diamond \neg p$   
 Subcontrariness:  $B_s. \Diamond \neg \neg p, \neg \Box \neg p$

The negative marker *na* is frequently used in this type, whereas *nahĩ* is pragmatically unacceptable and *mat* is totally ungrammatical.]

### 2.1.3 $B_s. \Box \neg p$

SENTENCES WHICH CARRY SPEAKER'S BELIEFS CONTAINING NEGATIVE EPISTEMIC NECESSITY

#### 2.1.3.1 $B_s. \Box \neg p \ t_n$

MODALITY: PRESUMPTIVE

ASPECT I HABITUAL	<i>Habitual Presumptive</i> $B_s. \Box \neg p \ t_{n-1} \bullet, t_n, \bullet \rightarrow$	<i>vah kbātā <u>nahī</u>/<u>?na</u>/<u>mat</u> hogā</i> 'He must not be eating habitually'
ASPECT II CONTINUOUS	<i>Continuous Presumptive</i> $B_s. \Box \neg p \ t_{n-1} \longrightarrow t_n \rightarrow$	<i>vah khā <u>nahī</u>/<u>?na</u>/<u>mat</u> rahā hogā</i> 'He must not be eating (at the moment)'
ASPECT III PERFECTIVE	<i>Perfective Presumptive</i> $B_s. \Box \neg p \longrightarrow \# t_n$	<i>usne khāyā <u>nahī</u>/<u>?na</u>/<u>mat</u> hogā</i> 'He must not have eaten by now'
ASPECTLESS	<i>Aspectless Presumptive</i> $B_s. \Box \neg p \ t_{n+1}$	<i>vah cor <u>nahī</u>/<u>?na</u>/<u>mat</u> hogā</i> 'He must not be a thief'

[MODAL MEANING: For all the information that I have, I believe that it is the case that  $\Box \neg p$  which is tantamount to  $B_s. \neg \neg \Diamond \neg p$  (i.e. I believe that it is not-possible that not- $p$ ), although I do not know whether  $p$  or not- $p$ . I, therefore, want to communicate to you in order for you to take notice of it and act accordingly that, although I don't know it, I believe that the action(s) or state(s) of affairs described in  $p$  necessarily exist at  $t_n$ . The other logical relations of this mood are the following:

Entailment:  $B_s. \Diamond \neg p$   
 Contradictoriness:  $B_s. \Diamond \neg \neg p, \neg \Box \neg p$   
 Contrariness:  $B_s. \Box \neg \neg p, \neg \Diamond \neg p$

The presumptives with all three aspects fall into this mood category. The most frequent negative marker in this type is *nahī* whereas *na* is pragmatically unacceptable and *mat* is ungrammatical.]

**2.1.3.2 B<sub>s</sub>.  $\Box \neg p$   $t_{n+1}$** 

MODALITY: FUTURE

ASPECT I HABITUAL	<i>Habitual Future</i> B <sub>s</sub> . $\Box \neg p$ $t_{n-1} \bullet, t_n, \bullet \rightarrow$	<i>vah khāyā nahĩ/ ?na/ @mat karegā</i> 'He will not be eating frequently'
ASPECT II CONTINUOUS	<i>Continuous Future</i> B <sub>s</sub> . $\Box \neg p$ $t_n \longrightarrow t_{n+1}$	<i>vah kbātā nahĩ/ ?na/ @mat rahegā</i> 'He will not continue eating'
ASPECT III PERFECTIVE	<i>Perfective Future</i>	_____
ASPECTLESS	<i>Aspectless Future</i> B <sub>s</sub> . $\Box \neg p$ $t_n + 1$	<i>vah nahĩ/ ?na/@mat kbāegā</i> 'He will not eat'

[MODAL MEANING: For all the information that I have, I believe that it is the case that necessarily  $p$  and it is not-possible that not- $p$  (i.e.  $\Box p \leftrightarrow \neg \Diamond \neg p$ ), although I cannot know it since the action(s) or state(s) of affairs reported in  $p$  do not exist at  $t_n$  and will take place only at  $t_{n+1}$ . I, therefore, want to communicate in order for you to take notice of it and act accordingly that I believe that the action(s) or state(s) of affairs described in  $p$  will necessarily take place or exist at  $t_{n+1}$ .

Entailment: B<sub>s</sub>.  $\Diamond \neg p$   
 Contradictoriness: B<sub>s</sub>.  $\Diamond \neg \neg p, \neg \Box \neg p$   
 Contrariness: B<sub>s</sub>.  $\Box \neg \neg p, \neg \Diamond \neg p$

The future tense comes in conjunction with this mood category. The negative marker *nahĩ* is frequently used in this mood type whereas *na* is pragmatically unacceptable and *mat* is ungrammatical.]

## 2.2 Negative Deontic Modality in Hindi<sup>7</sup>

$W_s. \neg!p$  <sup>8</sup>

### 2.2.1 $W_s. \Box \neg!p \ t_{n+1}$

SENTENCES WHICH CONTAIN NEGATIVE DEONTIC NECESSITY

MODALITY: NEGATIVE IMMEDIATE COMMAND

ASPECT I HABITUAL	<i>Habitual immediate command</i> $W_s. \Box \neg!p \ t_n^\bullet, t_n + 1, \bullet \rightarrow$	<i>(tū) ise</i> $\otimes \text{?} \underline{nah\tilde{i}} / \text{?} \underline{na} / \underline{mat} \ khāyā \ kar$ <i>(tūm) ise</i> $\otimes \text{?} \underline{nah\tilde{i}} / \underline{na} / \underline{mat} \ khāyā \ karo$ <i>(āp) ise</i> $\otimes \text{?} \underline{nah\tilde{i}} / \underline{na} / \text{?} \underline{mat} \ kījīe$  'Don't make a habit to eat it!'
ASPECT II CONTINUOUS	<i>Continuous immediate command</i> $W_s. \Box \neg!p \ t_n \longrightarrow t_n + 1$	<i>(tū) ise</i> $\otimes \text{?} \underline{nah\tilde{i}} / \text{?} \underline{na} / \underline{mat} \ rab$ <i>(tum) ise</i> $\otimes \text{?} \underline{nah\tilde{i}} / \underline{na} / \underline{mat} \ rabo$ <i>(āp) ise</i> $\otimes \text{?} \underline{nah\tilde{i}} / \underline{na} / \text{?} \underline{mat} \ rabīe$  'Don't continue eating it!'
ASPECT III PERFECTIVE	<i>Perfective immediate command</i>	—————
ASPECTLESS	<i>Aspectless immediate command</i> $W_s. \Box \neg!p \ t_{n+1}$	<i>(tū) ise</i> $\otimes \text{?} \underline{nah\tilde{i}} / \text{?} \underline{na} / \underline{mat} \ khā$ <i>(tum) ise</i> $\otimes \text{?} \underline{nah\tilde{i}} / \underline{na} / \underline{mat} \ t \ khāo$ <i>(āp) ise</i> $\otimes \text{?} \underline{nah\tilde{i}} / \underline{na} / \text{?} \underline{mat} \ khāīe$  'Don't eat it!'

<sup>7</sup> To express the speaker's deontic modality, Hindi has, in addition to the imperatives, some further syntactic constructions as well as other lexical items. A detailed discussion of the Hindi imperatives and other constructions expressing the agent's obligations can be found in Sharma 1999 and 2000 respectively.

<sup>8</sup> Whether an imperative utterance can be assigned truth-values or not is a very difficult question to answer. We have discussed elsewhere (Sharma, 1999) that it is wrong to define imperatives in terms of truth-conditions since they contain no truth-conditions whatsoever. Some scholars suggest that a model-theoretic account (in a referentially based theory of meaning) is still possible. So we can think of imperatives in the following terms:

indicatives	truth-conditions
interrogatives	answerhood-conditions
imperatives	satisfiability-conditions

[MODAL MEANING: By an utterance carrying deontic elements of this category, all I want is to ask you to recognize my intention and obligatorily not carry out an action  $x$  after the time of utterance  $t_n$ . The speaker recognizes that the addressee is in a position of carrying out the task at time  $t_{n+1}$ . The logical relations of this type are the following:

Entailment:  $\mathbb{W}_s. \Diamond \neg p$   
 Contradictoriness:  $\mathbb{W}_s. \Diamond \neg \neg p, \neg \Box \neg p$   
 Contrariness:  $\mathbb{W}_s. \Box \neg \neg p, \neg \Diamond \neg p$

*Mat* is most frequently used in this type of command. However, in the commands containing a polite pronoun *āp* the negative particle *na* is the standard form. *Nahī* is either ungrammatical or at least pragmatically unacceptable.]

### 2.2.2 $\mathbb{W}_s. \Box \neg !p \ t_{n+2}$

MODALITY: NEGATIVE DEFERRED COMMAND

ASPECT I HABITUAL	<i>Habitual deferred command</i> $\mathbb{W}_s. \Box \neg !p \ t_{n+1} \bullet, t_{n+2} \bullet \rightarrow$	<p>(<i>tū</i>) <i>ise</i> <math>\otimes ?nahī / ?na / \underline{mat} \ khāyā \ karnā</math>            (<i>tum</i>) <i>ise</i> <math>\otimes ?nahī / \underline{na} / \underline{mat} \ khāyā \ karnā</math>            (<i>āp</i>) <i>ise</i> <math>\otimes ?nahī / \underline{na} / ?\underline{mat} \ khāyā \ karnā</math></p> <p>‘Don’t make it a habit to eat it!’</p>
ASPECT II CONTINUOUS	<i>Continuous deferred command</i> $\mathbb{W}_s. \Box \neg !p \ t_{n+1} \longrightarrow t_{n+2}$	<p>(<i>tū</i>) <i>ise</i> <math>khāte \otimes ?nahī / ?na / \underline{mat} \ rahnā</math>            (<i>tum</i>) <i>ise</i> <math>khāte \otimes ?nahī / \underline{na} / \underline{mat} \ rahnā</math>            (<i>āp</i>) <i>ise</i> <math>khāte \otimes ?nahī / \underline{na} / ?\underline{mat} \ rahnā</math></p> <p>‘Don’t continue eating it!’</p>
ASPECT III PERFECTIVE	<i>Perfective deferred command</i>	_____
ASPECTLESS	<i>Aspectless deferred command</i> $\mathbb{W}_s. \Box \neg !p \ t_{n+2}$	<p>(<i>tū</i>) <i>ise</i> <math>\otimes ?nahī / ?na / \underline{mat} \ kbānā</math>            (<i>tum</i>) <i>ise</i> <math>\otimes ?nahī / \underline{na} / \underline{mat} \ kbānā</math>            (<i>āp</i>) <i>ise</i> <math>\otimes ?nahī / \underline{na} / ?\underline{mat} \ kbānā</math></p> <p>‘Don’t eat it!’</p>

[MODAL MEANING: By an utterance carrying deontic elements of this category, all I want is to ask you to obligatorily not carry out an action  $x$  at  $t_{n+2}$ . The speaker recognizes that the addressee will definitely carry out  $x$  unless asked not to, and therefore considers it necessary to prohibit him in advance. The other possible logical relations of this type are the following:

Entailment:  $W_s. \Diamond \neg p$   
 Contradictoriness:  $W_s. \Diamond \neg \neg p, \neg \Box \neg p$   
 Contrariness:  $W_s. \Box \neg \neg p, \neg \Diamond \neg p$

Like in the previous command type, *nahĩ* is either pragmatically unacceptable or anomalous. *Mat* can be used with the pronoun *tũ* and *tum*, although it is anomalous with the polite second person pronoun *āp*.]

### 2.2.3 $W_s. \Diamond \neg!p \ t_{n+1}$

MODALITY: NEGATIVE POLITE COMMAND WITH SUBJUNCTIVE

ASPECT I HABITUAL	<i>Habitual polite command</i> $W_s. \Diamond \neg!p \ t_{n \bullet, t_n + 1, \bullet \rightarrow}$	<i>tum ise kbāyā</i> $\otimes ?nahĩ/na/mat$ <i>karo</i> <i>āp ise kbāyā</i> $\otimes ?nahĩ/na/?mat$ <i>karē</i>  'Don't make it a habit of eating it, please!'
ASPECT II CONTINUOUS	<i>Continuous polite command</i> $W_s. \Diamond \neg!p \ t_n \longrightarrow t_n + 1$	<i>tum ise kbāte</i> $\otimes ?nahĩ/na/mat$ <i>raho</i> <i>āp ise kbāte</i> $\otimes ?nahĩ/na/?mat$ <i>rahē</i>  'Don't continue eating it, please!'
ASPECT III PERFECTIVE	<i>Perfective polite command</i>	_____
ASPECTLESS	<i>Aspectless polite command</i> $W_s. \Diamond \neg!p \ t_n - 1$	<i>tum ise</i> $\otimes ?nahĩ/na/?mat$ <i>kbāo</i> <i>āp ise</i> $\otimes ?nahĩ/na/?mat$ <i>kāhē</i>  'Don't eat it, please!'

[MODAL MEANING: By the utterance *Don't do x, if possible!* all I want is to ask you to possibly carry out an action  $x$  immediately after  $t_n$ . The speaker asks the addressee to possibly carry out the action immediately after the utterance,  $t_{n+1}$ . In contrast to (2.2.1 and 2.2.2), this is a command with pos-

sibility. The speaker, therefore, while asking the addressee to carry out an action  $x$ , gives him also the possibility of not fulfilling the obligation, if he fails to carry out the desired action. The logical relations of this type are the following:

Contradictoriness:  $B_s. \Box \neg \neg p, \neg \Diamond \neg p$   
 Subcontrariness:  $B_s. \Diamond \neg \neg p, \neg \Box \neg p$

*Nahĩ* is either ungrammatical or anomalous. *Mat* is acceptable with the pronoun *tum*. *Na* is the standard particle of negation in this type.]

#### 2.2.4 $W_s. \Diamond \neg!p \ t_{n+1}$

MODALITY: NEGATIVE COMMAND WITH CONTINGENT

ASPECT I HABITUAL	<i>Habitual contingent command</i> $W_s. \Diamond \neg!p \ t_n - 1, \bullet \ t_n, \bullet \rightarrow$	( <i>tũ</i> ) <i>ise kbāyā ?nahĩ/na/⊗mat karta/ kartĩ</i> ( <i>tum</i> ) <i>ise kbāyā ?nahĩ/na/⊗mat karte/ karatĩ</i> ( <i>āp</i> ) <i>ise kbāyā ?nahĩ/na/⊗mat karte karatĩ</i>  'You should not have made it a habit to eat it.'
ASPECT II CONTINUOUS	<i>Continuous contingent command</i> $W_s. \Diamond \neg!p \ t_{n-1} \text{---} t_n \rightarrow$	( <i>tũ</i> ) <i>ise kbātā? ?nahĩ/na/⊗mat rabtā</i> ( <i>tum</i> ) <i>ise kbāte ?nahĩ/na/⊗mat rabte</i> ( <i>āp</i> ) <i>ise kbāte ?nahĩ/na/⊗mat rabte</i>  'You should not have continued eating it.'
ASPECT III PERFECTIVE	<i>Perfective contingent command</i>	_____
ASPECTLESS	<i>Aspectless contingent command</i> $W_s. \Diamond \neg!p \ t_{n+1}$	( <i>tũ</i> ) <i>ise ?nahĩ/na/⊗mat kbātā</i> ( <i>tum</i> ) <i>ise ?nahĩ/na/⊗mat kbāte</i> ( <i>āp</i> ) <i>ise ?nahĩ/na/⊗mat kbāte</i>  'You should not have eaten it.'

[MODAL MEANING: The speaker wants the addressee to possibly carry out the action  $x$  immediately after  $t_n$ . Like (4.5.a), this too is a command with the possibility of carrying out the desired action, though its meaning is obtained by a counterfactual reasoning. It is therefore inherently of a conditional nature and its implicature is the following: 'You were obliged to carry out  $x$ , but so far you haven't. Therefore, it would be nice, if you could possibly carry out  $x$  now.' Like in (2.2.3) the logical



relations of this type are the following:

Contradictoriness:  $B_s. \Box \neg \neg p, \neg \Diamond \neg p$   
 Subcontrariness:  $B_s. \Diamond \neg \neg p, \neg \Box \neg p$

The negative marker *mat* is ungrammatical and *nahĩ* is anomalous. The standard acceptable form in *na*.]

### 3. Conclusion

As we have seen in this brief paper, the distribution of three negative particles in Hindi is marked and is geared to account for different types of sentential negative modality. By sentential modality we mean that semantic or grammatical element which shows the commitment of the speaker to the truth of the proposition contained in the sentence. The Hindi negative particles can be characterized in terms of the markedness they show at the level of sentence (or utterance): epistemic necessity is expressed mainly through the particle *nahĩ*, deontic necessity is expressed exclusively by the particle *mat*, and both the epistemic and deontic possibilities are expressed by the particle *na*. In other words, the particle *nahĩ* is used by the speaker to assert the veridicality of the events or states of affairs contained in a proposition *p*, the particle *mat* is employed by the speaker mainly to issue a command which carries a deontic necessity: the addressee must be involved in carrying out the task required by the speaker, and the particle *na* can have both the epistemic and deontic possibility meanings. There are, no doubt, cases in which this modality-based account does not seem to hold, but the only reason for the violation can be thought to be either the speaker's preferences based on his dialectal or cultural background or some lexical items which are against the modality type of the sentence.

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*ABSTRACT*

The paper deals with different kinds of negative modality expressed through three negative markers in Hindi, namely, *nahī̃*, *mat*, and *na*. The paper rejects the idea of considering these markers in terms of the degree of the illocutionary strength they are supposed to carry and proposes that they are employed by the speaker to express different kinds of epistemic and deontic negative modalities in Hindi. Hence they are not synonymous. *Nahī̃* is employed mainly to express negative epistemic necessity whereas *mat* is used exclusively to express negative deontic necessity. *Na*, on the other hand, is employed to express both the negative epistemic possibility as well as negative deontic possibility.

*KEYWORDS*

Hindi. Negation. Modality.